Basic Programming Tasks

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Give an example of each of the following concepts in the c# language. Write the code, screenshot it and add it to this document:

1.How to print a message:

```
Console.WriteLine("Hello world");
```

2.How to take int or double input from the user:

```
int age = Convert.ToInt32(Console.ReadLine());
double score = Convert.ToDouble(Console.ReadLine());
```

3.How to take a string input from the user:

```
string name = Console.ReadLine();
```

4.How to declare and initialize a boolean type:

```
bool keeprunning = false;
//or
bool Keeprunning = true;
```

5.How to declare and use arrays:

```
string[] people = { "Greg", "Mann", "Zadius" };
Console.WriteLine(people[0]);//prints Greg
Console.WriteLine(people[1]);//prints Mann
Console.WriteLine(people[2]);//prints Zadius
```

Or

```
string name1 = Console.ReadLine();
string name2 = Console.ReadLine();
string name3 = Console.ReadLine();

string[] people = {name1, name2, name3 };
Console.WriteLine(people[0]);//prints the value of name1
Console.WriteLine(people[1]);//prints the value of name2
Console.WriteLine(people[2]);//prints the value of name3
```

6.How to use the if conditional statement:

```
if(4 > 5)
{Console.WriteLine("this message was printed because 4 is less than 5"); }
```

7.How to use the if else conditional statement:

```
bool trueorfalse = true;
    if (trueorfalse)
{ Console.WriteLine("this prints if the bool was true"); }
    else
{ Console.WriteLine("This prints if the bool was false"); }
```

8.how to use a switch statement:

```
    int grade = Convert.ToInt32(Console.ReadLine());
switch (grade)
{
    case 9:
        Console.WriteLine("You are in grade 9");
        break;
    case 10:
        Console.WriteLine("You are in grade 10");
        break;
    case 11:
        Console.WriteLine("You are in grade 11");
        break;
    case 12:
        Console.WriteLine("You are in grade 12");
        break;
    default:
        Console.WriteLine("You are not in highschool");
        break;


}
```

9.How to use the goto label to create a loop:

```
    int counter = 1;
beginning:
    Console.WriteLine("This is the " + counter + " time to print this message");
    if(counter < 10)
    {counter++;
            goto beginning; }
```

10.How to use for loops:

```
for(int i = 1; i <= 10; i++)
{ Console.WriteLine("This is the " + i + " time to print this message"); }
```

11. How to use while loops:

```
int counter = 1;
while (counter <= 10) { Console.WriteLine(" This is the " + counter + "time to print this message");
    counter++;
}
```

Or

```
int counter = 1;
bool keeprunning = true;
while (keeprunning)
{
    Console.WriteLine("This is the " + counter + "time to print this message");
    counter++;
    if (counter > 10) { keeprunning = false; }
}
```

12.How to use do while loops:

```
int counter = 1;
do
{
    Console.WriteLine(counter);
    counter++;
}while (counter <= 10);
```

13. How to use foreach with an array:

```
String[] nameS = { "Greg", "Mann", "Zadius" };
int[] ageS = { 14, 14, 15, };
foreach (String name in nameS) { Console.WriteLine(name); }
foreach (int age in ageS) { Console.WriteLine(age); }
```